



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,061	08/01/2003	Mchul Patel	1400-11 (1508)	3603
7590 09/30/2005			EXAMINER	
George Likourezos. Esq. Carter, DeLuca, Farrell & Schmidt, LLP Suite 225 445 Broad Hollow Road Melville, NY 11747			WALSH, DANIEL I	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/633,061

Applicant(s)

PATEL ET AL.

Examiner

Daniel I. Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-30 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9, 10, 12, 15 and 17-24 is/are rejected.
- 7) ☒ Claim(s) 6, 8, 11, 13, 14, 16, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 24 June 2005.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 10, 12, 15, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Lucera et al. (US 6,874,690).

Re claim 1, Lucera et al. (US 6,874,690) teaches a plug and play imagine engine configured and dimensioned to fit within a predetermined form factor of an optical code reader having a housing and circuitry therein, the imagine engine comprising: an imaging assembly including at least one image sensor (FIG. 1A); at least one illumination assembly having at least one illumination device (abstract), the at least one imagine sensor and the at least one illuminating device being provided on a substrate (FIG. 1A); and an interface (27) having at least one signal path for providing at least one control signal to the imaging assembly wherein the at least one control signal is generated and transmitted to the interface of the plug and play imaging engine by the circuitry housed within the housing for operating the imaging assembly and at least

one illumination assembly (col 14, lines 15+ which teach, among other things, that laser drive circuitry maybe contained in the housing to supply current to the diodes and to control output optical power levels of the diode and provide control and power operations to the scanner, which is interpreted to include control signals transmitted to the interface by the circuitry of the housing for operating the imaging assembly and at least one illumination assembly.

Re claim 2, as discussed above, the signal path (interface) transfers a control signal between the imaging assembly and circuitry of the optical code reader.

Re claim 3, as the interface is one of an electrical/optical/wireless interface, an electrical path is formed by the interfaces connecting.

Re claim 4, the imaging engine is on a circuit board, and is broadly interpreted as an integrated circuit package.

Re claim 5, the Examiner notes that the image sensor (photo detector, for example) is positioned in an optical beam path of the code reader in order to receive light.

Re claim 10, the illumination device of a LED, laser or flash module has been discussed above.

Re claim 12, the limitations have been discussed above re claim 1.

Re claim 15, the limitations have been discussed above re claim 4.

Re claim 18, the limitations have been discussed above re claim 1. The Examiner notes that as the code reader is fixed, its position is interpreted to be one that is aimed at an optical code (when held above it), and that it's activated when power is provided.

Re claim 19, as discussed above, a control signal is generated in order to power the device.

Re claim 20, the limitations have been discussed above re claim 4.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 7, 9, 17, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucera et al.

Re claim 7, the teachings of Lucera et al. have been discussed above, including a circuit board. Though Lucera et al. is silent to the substrate being a semiconductor, it would have been obvious to one of ordinary skill in the art to use a silicon substrate (well known and conventional material) in order to provide a substrate that allows for efficient electronic communication on the circuit board, such as silicon, while also being a cost effective solution that is reliable.

Re claim 9, though Lucera et al. is silent to the sensor and illumination assembly being flush with an outer surface of the substrate, as the sensor and illumination assembly are on the substrate, it is interpreted as portions for placement that are substantially flush with an outer surface of the substrate.

Re claim 17, the teachings of Lucera et al. have been discussed above. Though Lucera et al. is silent to another imaging engine being interchanged with the imaging engine, as the engine is replaceable, the Examiner notes it would have been obvious to have them interchangeable with another, in case of replacement or when a different operating means is desired.

Re claim 21, the limitations have been discussed above re claim 1. Though Lucera et al. is silent to a kit and at least two imaging engines, as the devices are removable, it is obvious to one of ordinary skill in the art to have two engines, for replacement or changing a configuration of the reader.

Re claim 22, the limitations have been discussed above re claim 1.

Re claim 23, the limitations have been discussed above re claim 21.

Re claim 24, the limitations have been discussed above re claim 4.

#### ***Allowable Subject Matter***

4. Claims 6, 8, 11, 13, 14, 16, and 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 27-30 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach the specifics of a targeting assembly of the imaging engine, an optical element of the engine overlaying/on a face of the engine, and that the LEDs produce different wavelength light. Though such targeting means, optical elements, and LEDs of different wavelength are known and conventional in handheld barcode readers, for example, the Examiner notes that such modification to the prior art of Lucera et al., would have been non obvious.

### ***Response to Arguments***

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

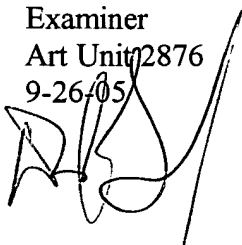
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh  
Examiner  
Art Unit 2876  
9-26-05



KARL D. FRECH  
PRIMARY EXAMINER